

What is claimed is:

1. A mobile communication system comprising:

a mobile terminal;

a radio base station device communicating with said terminal over a radio link;

5 first control means controlling said radio base station and performing signaling transfer control; and

second control means provided physically separately from said first control means for performing user data transfer control relating to said terminal; wherein:

10 said first control means includes inquiry means for sending an inquiry signal for inquiring about timing information of said second control means, said timing information being required for signaling transfer control and being managed by said second control means; and

15 said second control means includes sending means for sending said timing information to said first control means when said second control means receives said inquiry signal.

2. A mobile communication system comprising:

a mobile terminal;

a radio base station device communicating with said mobile terminal over a radio link;

5 first control means controlling said radio base station and performing signaling transfer control; and

second control means provided physically separately from said first control means for performing user data transfer control relating to said terminal;

wherein:

10 said second control means manages timing information required for signaling transfer control by said first control means and includes sending means for periodically sending said timing information to said first control means.

3. The mobile communication system according to claim 1, wherein said first control means includes correction means for compensating the timing information sent from said second control means.

4. The mobile communication system according to claim 2, wherein said first control means includes correction means for compensating the timing information sent from said second control means.

5. A mobile communication system comprising:

a mobile terminal;

a radio base station device communicating with said mobile terminal over a radio link;

5 first control means controlling said radio base station and performing signaling transfer control; and

second control means provided physically separately from said first control means for performing user data transfer control relating to said terminal; wherein:

10 said mobile communication system includes time information sending means for sending time information;

said first and second control means each includes clock control means for synchronizing the time of a clock built in said first control means and the time of a clock built in said second control means by using said time

15 information;

said first control means includes inquiry means for sending an inquiry

signal for inquiring about timing information of said second control means,
said timing information being required for signaling transfer control and being
managed by said second control means;

20 said second control means includes sending means for sending said
timing information associating with the time of the clock built in said second
control means to said first control means when said second control means
receives said inquiry signal; and

 said first control means calculates the current timing information from
25 said timing information and the time of the clock built in said first control means
to perform signaling transfer control.

6. A mobile communication system comprising:

a mobile terminal;

a radio base station device communicating with said mobile terminal
over a radio link;

5 first control means controlling said radio base station and performing
signaling transfer control; and

second control means provided physically separately from said first
control means for performing user data transfer control relating to said terminal;
wherein:

10 said mobile communication system includes time information sending
means for sending time information;

 said first and second control means each includes clock control means
for synchronizing the time of a clock built in said first control means and the
time of a clock built in said second control means by using said time
15 information;

 said second control means manages timing information required for

signaling transfer control by said first control means and includes sending means for associating said timing information with the time of the clock built in said second control means and periodically sending said timing information to
20 said first control means; and

said first control means calculates the current timing information from said timing information and the time of the clock built in said first control means to perform signaling transfer control.

7. A radio base station control system that controls a radio base station device communicating with a mobile terminal over a radio link and comprises first control means performing signaling transfer control and second control means performing user data transfer control relating to said terminal, said first
5 and second control means being provided physically separated from each other;

wherein:

said first control means includes inquiry means for sending an inquiry signal for inquiring about timing information of said second control means, said
10 timing information being required for signaling transfer control and being managed by said second control means; and

said second control means includes sending means for sending said timing information to said first control means when said second control means receives said inquiry signal.

8. A radio base station control system that controls a radio base station device communicating with a mobile terminal over a radio link and comprises first control means performing signaling transfer control and second control means performing user data transfer control relating to said terminal, said first
5 and second control means being provided physically separated from each

other;

wherein:

said second control means manages timing information required for signaling transfer control by said first control means and includes sending
10 means for periodically sending said timing information to said first control means.

9. The radio base station control system according to claim 7, wherein said first control means includes correction means for compensating said timing information sent from said second control means.

10. The radio base station control system according to claim 8, wherein said first control means includes correction means for compensating said timing information sent from said second control means.

11. A radio base station control system that controls a radio base station device communicating with a mobile terminal over a radio link and comprises first control means performing signaling transfer control and second control means performing user data transfer control relating to said terminal,
5 said first and second control means being provided physically separated from each other;

wherein:

said radio base station control system includes a time information sending means for sending time information;

10 said first and second control means each includes clock control means for synchronizing the time of a clock built in said first control means and the time of a clock built in said second control means by using said time information;

said first control means includes inquiry means for sending an inquiry

15 signal for inquiring about timing information of said second control means,
said timing information being required for signaling transfer control and being
managed by said second control means;

 said second control means includes sending means for sending said
timing information associating with the time of the clock built in said second
20 control means to said first control means when said second control means
receives said inquiry signal; and

 said first control means calculates the current timing information from
said timing information and the time of the clock built in said first control means
to perform signaling transfer control.

 12. A radio base station control system that controls a radio base
station device communicating with a mobile terminal over a radio link and
comprises first control means performing signaling transfer control and second
control means performing user data transfer control relating to said terminal,
5 said first and second control means being provided physically separated from
each other;

 wherein:

 said radio base station control system includes a time information
sending means for sending time information;

10 said first and second control means each includes clock control means
for synchronizing the time of a clock built in said first control means and the
time of a clock built in said second control means by using said time
information;

 said second control means manages timing information required for
15 signaling transfer control by said first control means and includes sending
means for associating said timing information with the time of the clock built in

said second control means and periodically sending said timing information to said first control means; and

20 said first control means calculates the current timing information from said timing information and the time of the clock built in said first control means to perform signaling transfer control.

13. A radio base station control method in a radio base station control system that controls a radio base station device communicating with a mobile terminal over a radio link and comprises first control means performing signaling transfer control and second control means performing user data
5 transfer control relating to said terminal, said first and second control means being provided physically separated from each other;

 wherein:

 inquiry means is provided in said first control means for sending an inquiry signal for inquiring about timing information of said second control
10 means, said timing information being required for signaling transfer control and being managed by said second control means; and

 sending means is provided in said second control means for sending said timing information to said first control means when said second control means receives said inquiry signal.

14. A radio base station control method in a radio base station control system that controls a radio base station device communicating with a mobile terminal over a radio link and comprises first control means performing signaling transfer control and second control means performing user data
5 transfer control relating to said terminal, said first and second control means being provided physically separated from each other;

 wherein:

said second control means manages timing information required for signaling transfer control by said first control means, and sending means is
10 provided in said second control means for periodically sending the timing information to said first control means.

15. The radio base station control method according to claim 13, wherein correction means is provided in said first control means for compensating the timing information sent from said second control means.

16. The radio base station control method according to claim 14, wherein correction means is provided in said first control means for compensating for the timing information sent from said second control means.

17. A radio base station control method in a radio base station control system that controls a radio base station device communicating with a mobile terminal over a radio link and comprises first control means performing signaling transfer control and second control means performing user data
5 transfer control relating to said terminal, said first and second control means being provided physically separated from each other;

wherein:

time information sending means for sending time information is provided;

10 clock control means is provided in each of said first and second control means for synchronizing the time of a clock built in said first control means and the time of a clock built in said second control means by using said time information;

inquiry means is provided in said first control means for sending an
15 inquiry signal for inquiring about timing information of said second control means, said timing information being required for signaling transfer control and

being managed by said second control means;

sending means is provided in said second control means for sending said timing information associating with the time of the clock built in said

20 second control means to said first control means when said second control means receives said inquiry signal; and

said first control means calculates the current timing information from said timing information and the time of the clock built in said first control means to perform signaling transfer control.

18. A radio base station control method in a radio base station control system that controls a radio base station device communicating with a mobile terminal over a radio link and comprises first control means performing signaling transfer control and second control means performing user data
5 transfer control relating to said terminal, said first and second control means being provided physically separated from each other;

wherein:

time information sending means for sending time information is provided;

10 clock control means is provided in each of said first and second control means for synchronizing the time of a clock built in said first control means and the time of a clock built in said second control means by using said time information;

said second control means manages timing information required for
15 signaling transfer control by said first control means and includes sending means for associating said timing information with the time of the clock built in said second control means and periodically sending said timing information to said first control means; and

said first control means calculates the current timing information from
20 said timing information and the time of the clock built in said first control means
to perform signaling transfer control.